

5' CAA CTC TNN TAC GAT CAC TAT AGG GAA AGC TGG TAG CCT GCA GGT ACC GGT CCG

63 72 81 90 99 108

GAA TTC CCG GGT CGA CCC ACG CGT CCG AGC GGA TCC ACC AGC TTT ATG AAA CTG

M K L

117 126 135 144 153 162

AAC ACA AGT GCC GGC AAT GTC GAT ATC TAT AAA AAA CTG TAC CAC AGT GAT GCC

N T S A G N V D I Y K K L Y H S D A

171 180 189 198 207 216

TGT TCT TCA AAA GCA GTG GTT TCT TTA CGC TGT ATA GCC TGC GGG GTC AAC TTG

C S S K A V V S L R C I A C G V N L

225 234 243 252 261 270

AAC TCA AGC CGC CAG AGC AGG ATC GTG GGC GGC GAG AGC GCG CTC CCG GGG GCC

N S S R Q S R I V G G E S A L P G A

279 288 297 306 315 324

TGG CCC TGG CAG GTC AGC CTG CAC GTC CAG AAC GTC CAC GTG TGC GGA GGC TCC

W P W Q V S L H V Q N V H V C G G S

333 342 351 360 369 378

ATC ATC ACC CCC GAG TGG ATC GTG ACA GCC GCC CAC TGC GTG GAA AAA CCT CTT

I I T P E W I V T A A H C V E K P L

387 396 405 414 423 432

AAC AAT CCA TGG CAT TGG ACG GCA TTT GCG GGG ATT TTG AGA CAA TCT TTC ATG

N N P W H W T A F A G I L R Q S F M

441 450 459 468 477 486

TTC TAT GGA GCC GGA TAC CAA GTA GAA AAA GTG ATT TCT CAT CCA AAT TAT GAC

F Y G A G Y Q V E K V I S H P N Y D

495 504 513 522 531 540

TCC AAG ACC AAG AAC AAT GAC ATT GCG CTG ATG AAG CTG CAG AAG CCT CTG ACT

S K T K N N D I A L M K L Q K P L T

549 558 567 576 585 594

TTC AAC GAC CTA GTG AAA CCA GTG TGT CTG CCC AAC CCA GGC ATG ATG CTG CAG

F N D L V K P V C L P N P G M M L Q

603 612 621 630 639 648

CCA GAA CAG CTC TGC TGG ATT TCC GGG TGG GGG GCC ACC GAG GAG AAA GGG AAG

P E Q L C W I S G W G A T E E K G K

FIGURE 1A

ACC	TCA	GAA	GTG	CTG	AAC	GCT	GCC	AAG	GTG	CTT	CTC	ATT	GAG	ACA	CAG	AGA	TGC
T	S	E	V	L	N	A	A	K	V	L	L	I	E	T	Q	R	C
AAC	AGC	AGA	TAT	GTC	TAT	GAC	AAC	CTG	ATC	ACA	CCA	GCC	ATG	ATC	TGT	GCC	GGC
N	S	R	Y	V	Y	D	N	L	I	T	P	A	M	I	C	A	G
TTC	CTG	CAG	GGG	AAC	GTC	GAT	TCT	TGC	CAG	GGT	GAC	AGT	GGA	GGG	CNT	CTG	GTC
F	L	Q	G	N	V	D	S	C	Q	G	D	S	G	G	X	L	V
ACT	TCG	AAG	AAC	AAT	ATC	TGG	TGG	CTG	ATA	GGG	GAT	ACA	AGC	TGG	GGT	TCT	GGC
T	S	K	N	N	I	W	W	L	I	G	D	T	S	W	G	S	G
TGT	GCC	AAA	GCT	TAC	AGA	CCA	GGA	GTG	TAC	GGG	AAT	GTG	ATG	GTA	TTC	ACG	GAC
C	A	K	A	Y	R	P	G	V	Y	G	N	V	M	V	F	T	D
TGG	ATT	TAT	CGA	CAA	ATG	AGG	GCA	GAC	GGC	TAA	TCC	ACA	TGG	TCT	TCG	TCC	TTG
W	I	Y	R	Q	M	R	A	D	G	*							
ACG	TCG	TTT	TAC	AAG	AAA	ACA	ATG	GGG	CTG	GTT	TTG	CTT	CCC	CGT	GCA	TGA	TTT
ACT	CTT	AGA	GAT	GAT	TCA	GAG	GTC	ACT	TCA	TTT	TTA	TTA	AAC	AGT	GAA	CT	3'

FIGURE 1B

1	M	K	L	N	T	S	A	G	N	V	D	I	Y	K	K	L	Y	H	S	D	A	C	S	S	K	A	V	V	S	L	SEQ ID NO-1	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L	Y	H	S	D	A	C	S	S	K	A	V	V	S	L	GI 416132	
1	M	W	F	-	-	-	-	-	-	-	L	V	L	C	L	A	L	S	L	G	-	-	-	-	-	-	-	-	-	-	GI 186653	
1	M	W	F	-	-	-	-	-	-	-	L	I	L	F	L	A	L	F	L	G	-	-	-	-	-	-	-	-	-	-	GI 55527	
31	R	C	I	A	C	G	V	N	L	N	S	S	R	Q	S	R	I	V	G	G	E	S	A	L	P	G	A	W	P	W	SEQ ID NO-1	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GI 416132		
14	-	-	-	-	-	G	T	G	A	A	P	P	I	Q	S	R	I	V	G	G	W	E	C	E	Q	H	S	Q	P	W	GI 186653	
14	-	-	-	-	-	I	D	A	A	P	P	V	Q	S	R	I	I	G	G	F	N	C	E	K	N	S	Q	P	W	GI 55527		
61	Q	V	S	L	H	V	Q	N	V	H	V	C	G	G	S	I	I	T	P	E	W	I	V	T	A	A	H	C	V	E	SEQ ID NO-1	
15	V	V	A	L	Y	F	D	D	Q	Q	V	C	G	A	S	L	V	S	R	D	W	L	V	S	A	A	H	C	V	Y	GI 416132	
39	Q	A	A	L	Y	H	F	S	T	F	Q	C	G	G	I	L	V	H	R	Q	W	V	L	T	A	A	H	C	I	S	GI 186653	
39	H	V	A	V	Y	R	F	A	R	Y	Q	C	G	G	V	L	L	D	A	N	W	V	L	T	A	A	H	C	Y	N	GI 55527	
91	K	P	L	N	N	P	W	H	W	-	-	-	-	-	-	-	-	-	T	A	F	A	G	I	L	R	Q	S	F	M	SEQ ID NO-1	
45	G	R	N	M	E	P	S	K	W	-	-	-	-	-	-	-	-	-	K	A	V	L	G	-	L	H	M	A	S	N	GI 416132	
69	D	N	Y	Q	L	-	-	-	W	L	G	R	H	N	L	F	D	D	E	N	T	A	Q	F	V	H	V	S	E	S	GI 186653	
69	D	K	Y	Q	V	-	-	-	W	L	G	K	N	N	R	F	E	D	E	P	S	A	Q	H	Q	L	I	S	K	A	GI 55527	
112	F	Y	G	A	G	Y	Q	-	-	-	V	E	K	V	I	S	H	P	N	Y	D	S	K	T	K	N	N	D	I	A	SEQ ID NO-1	
65	L	T	S	P	Q	I	E	T	R	L	I	D	Q	I	V	I	N	P	H	Y	N	K	R	R	K	N	N	D	I	A	GI 416132	
96	F	P	H	P	G	F	N	M	S	L	L	E	-	-	-	N	H	T	R	Q	A	D	E	D	Y	S	H	D	L	M	GI 186653	
96	I	P	H	P	G	F	N	M	S	L	L	N	K	-	-	-	D	H	T	P	H	P	E	D	D	Y	S	N	D	L	M	GI 55527
139	L	M	K	L	Q	K	P	L	-	T	F	N	D	L	V	K	P	V	C	L	P	N	P	G	M	M	L	Q	P	E	SEQ ID NO-1	
95	M	M	H	L	E	M	K	V	-	N	Y	T	D	Y	I	Q	P	I	C	L	P	E	E	N	Q	V	F	P	P	G	GI 416132	
123	L	L	R	L	T	E	P	A	D	T	I	T	D	A	V	K	V	V	E	L	P	T	Q	E	P	E	V	-	-	G	GI 186653	

FIGURE 2

WSSW 545550

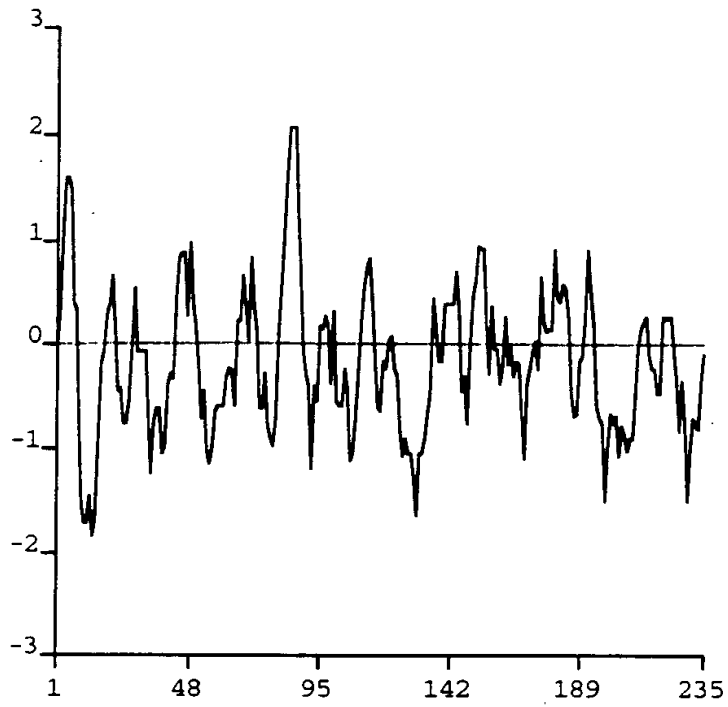


FIGURE 3

FIGURE 4